In The Claims

Please amend the claims as follows:

1.   (CURRENTLY AMENDED)   An access control system with a plurality of locks and keys, at least part of said locks and keys having memory ~~means~~,

said access control system comprising~~characterized by~~

said memory ~~means~~ of a key being equipped to receive and store information concerning~~comprising~~ any access rights of said key and information designated for other keys and locks;

said memory ~~means~~ of a lock being equipped to receive and store information concerning~~comprising~~ any access rights for said lock and information designated for other keys and locks; ~~and~~

means for exchanging said information between locks and keys ~~such as to propagate said information in a snowball like way to its destination~~, and

a confirmation message producable by an *n-th* lock or key, the confirmation message acknowledging reception of an original message which confirmation message serves to control erasing of copies of the original message in the memories of the locks and keys.

2. (PREVIOUSLY PRESENTED) The access control system according to claim 1, wherein the information concerning access rights of a key includes one or more tokens and the information designated for other keys and locks includes one or more messages for said keys and locks.

3. (CURRENTLY AMENDED)   The access control system according to claim 1, wherein the memory ~~means~~ in the key and the lock stores at least a

2

partial view of the system, and the exchanging means triggers an update of said view.

4. (PREVIOUSLY PRESENTED) The access control system according to claim 3, wherein the update triggered by the exchanging means is performed off-line, particularly right after said exchanging means has completed its function.

5. (PREVIOUSLY PRESENTED) The access control system according to claim 1, wherein the information designated for other keys and locks includes one or more messages for said other keys and locks and is exchanged off-line between a key and a lock.

6. (PREVIOUSLY PRESENTED) The access control system according to claim 1, wherein the means for exchanging information between a lock and a key are activated when said key is engaged with said lock.

7. (CURRENTLY AMENDED) A key for use in an access control system according to claim 1, wherein the memory ~~means~~ includes a read/write section dedicated to the information designated for other keys and locks.

8. (CURRENTLY AMENDED) The key according to claim 1~~7~~, ~~characterized by~~ further comprising: a power source, preferably being rechargeable when said key is used with a lock.

9. (CURRENTLY AMENDED) A lock for use in an access control system ~~according to claim 1~~ with a plurality of locks and keys, at least part of said locks and keys having memory, wherein

said memory of a key being equipped to receive and store information concerning any access rights of said key and information designated for other keys and locks,

3

said memory of a lock being equipped to receive and store information concerning any access rights for said lock and information designated for other keys and locks,

means for exchanging said information between locks and keys, and

a confirmation message producable by an *n-th* lock or key, the confirmation message acknowledging reception of an original message which confirmation message serves to control erasing of copies of the original message in the memories of the locks and keys,

—wherein the memory means includes a read/write section dedicated to the information designated for other keys and/or locks.

10. (CURRENTLY AMENDED)   The lock according to claim 9, ~~characterized by~~further comprising a power source, preferably being rechargeable when a key is used with said lock.

11. (CURRENTLY AMENDED)   A method for propagating information in an electronic lock-and-key system, ~~characterized in that~~said method comprising:

inserting an original message to be propagated to an *n-th* lock or key ~~is inserted~~ into a memory of a first key or a first lock, respectively,

copying, on any use of said first key or said first lock, said original message ~~is copied~~ into a memory of a second lock or key, respectively, but remains in said first key's or first lock's, respectively, memory,

copying, on any subsequent use of said first and second key and said first and second lock, said original message ~~is copied~~ into a memory of a next lock or key, respectively, but remains in the memories of said previously used locks and keys, respectively,

4

until said original message, propagateding said original message in the described snowball-like wayuntil it, reaches its destination, i.e. said *n-th lock or key*, and

producing a confirmation message in the n-th lock or key, thereby acknowledging reception of said original message which confirmation message serves to control erasing of the copies of the original message in the memories of the locks and keys.

12.   (CANCELLED)

13.   (CANCELLED)

—14.   (CURRENTLY AMENDED)   The method for propagating information according to claim 113, further characterized in thatcomprising: propagating the confirmation message is propagated through the system in the same way as the original message,

—said confirmation message, when said confirmation message is received by a lock or key whose memory still contains a copy of said original message, acts on, in particular serves to erasinge said original message.

—15. (CURRENTLY AMENDED) The method for propagating information according to any of the claims 11-to-14, further comprisingcharacterized in that: selectively or universally erasing copies of said original message after a selective or universal time-out, copies of said original message are selectively or universally erased.

—16. (CURRENTLY AMENDED) The method for propagating information according to any of the claims 11-to-15, wherein original messages and confirmation messages, especially those concerning the same lock or key, are ordered, in particular sequentially numbered.

5

—17. (CURRENTLY AMENDED) The method for propagating information according to claim 16, further ~~characterized in that~~ comprising: erasing any message of lower order, in particular with a lower sequence number, ~~is erased~~ in the respective memory when a message of higher order, in particular with a higher sequence number, is received by a lock or key during propagation.

—18. (CURRENTLY AMENDED) The method for propagating information according to ~~any of the preceding method~~ claims 11~~to 17~~, wherein original messages and confirmation messages are fully or partly encrypted, in particular using a shared key encryption scheme and a public key encryption scheme.

19. (PREVIOUSLY PRESENTED) A computer readable program embodied in a storage media including computer readable program instructions for controlling propagation of information in an electronic lock-and-key system, said storage media comprising:

computer readable program instructions to store an original message to be propagated to an n-th lock or key in a memory of a first lock;

computer readable program instructions to control when a first key is used with said first lock, said original message is copied into said first key's memory, but remains in said first lock's memory;

computer readable program instructions to control when a first key is used with a second lock, said original message is copied into said second lock's memory, but remains in said first key's memory; and

computer readable program instructions to control when a second key is used with said second lock, said original message is copied into said second key's

memory, said original message remains in said second lock's memory until said original message is propagated to said n-th lock or key.

20.   (PREVIOUSLY PRESENTED)   The storage media of claim 19, further comprising computer readable program instructions to control said n-th lock or key to produce a confirmation message acknowledging reception of said original message, said confirmation message serves to control erasing of the original message in the memories of said locks and keys.

21.   (PREVIOUSLY PRESENTED)   The storage media of claim 20, further comprising computer readable program instructions to control said confirmation message is propagated through said system the same as said original message.

22.   (PREVIOUSLY PRESENTED)   The storage media of claim 19, further comprising computer readable program instructions for selectively or universally erasing copies of said original message after a time-out.

23.   (PREVIOUSLY PRESENTED)   The storage media of claim 19, further comprising computer readable program instruction for ordering said original messages and confirmation messages.

24.   (PREVIOUSLY PRESENTED)   The storage media of claim 23, further comprising computer readable program instruction for erasing a message of a lower order when a message of higher order is received by said lock or key during propagation.

25.   (PREVIOUSLY PRESENTED)   The storage media of claim 19, further comprising computer readable program instruction for encrypting original messages and confirmation messages using an encryption scheme.